KLIMOV, Valeriy Ivanovich; GORELOV, V.M., insh., red.; DUGINA, M.A., tekhn.red.

[Materials for cutting tools] Materialy reshushchikh instrumentov. Pod red. V.M.Gorelova. Izd.3. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1958. 42 p. (Nauchno-populiarnaia biblioteka rabochego stanochnika, no.5)
(Metal-cutting tools) (MIRA 12:5)

PHASE I BOOK EXPLOITATION 1027

Klimov, Valeriy Ivanovich; Lerner, Anna Samoylovna; Pekarskiy, Mikhail Davydovich; Smirnov, Lev Nikolayevich; Shleymovich, Mark Abramovich

Spravochnik instrumental'shchika-konstruktora (Tool Designer's Handbook) 2d ed., rev. and enl. Moscow, Mashgiz, 1958. 608 p. 40,000 copies printed.

Reviewer: Alekseyev, G.A., Engineer; Eds.: Rozin, A.I., Aronov, Z.M., and Ploskov, V.A., Engineers; Tech. Ed.: Dugina, N.A.; Executive Ed. (Ural-Siberian Division, Mashgiz): Bezukladnikov, M.A., Engineer.

PURPOSE: This handbook is intended for engineers, technicians and students in vuzes and tekhnikums.

COVERAGE: In the handbook data are presented for the design of cutting tools for planing, drilling, boring, countersinking, milling, threading, broaching and gear cutting. Design data for high-speed and carbide tools for use on automatic and semiautomatic machines are also discussed. No personalities are mentioned. There are 53 Soviet references.

TABLE OF CONTENTS:

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2

ROZIN, Aleksandr Iosifovich; FEDOROV, V.M., inzh., retsenzent; KLIMOV, V.I., inzh., retsenzent; KUKLIN, L.G., kand.tekhn.nauk; retsenzent; RABOTIN, A.N., inzh., retsenzent; SHABASHOV, S.P., kand. tekhn.nauk, retsenzent; UVAROVA, A.F., tekhn.red.; DUGINA, M.A., tekhn.red.

[Operator of machines for manufacturing metal-cutting tools] Slesar' - instrumental'shchik. Izd.2., perer. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 247 p. (MIRA 13:2)

(Machine-shop practice)

25828 S/535/60/000/130/003/007
E081/E335

24.4200

AUTHOR: Klimov, V.I., Candidate of Technical Sciences

TITLE: Calculation of Thin-walled Conical Bars of Open Profile

PERIODICAL: Moscow. Aviatsionnyy institut. Trudy. No. 130. 1960. Prochnost' aviatsionnykh konstruktsiy. pp. 57 - 86

TEXT: The paper is a continuation of previous work (Ref. 4 - Dissertatsiya, MAI, 1954; Ref. 5 - Trudy MAI, No. 89, Oborongiz, 1957). The conical bar under consideration is illustrated in the figure. It is assumed that the bar is long in comparison with the lateral dimensions, that the contour of a cross-section does not deform in its own plane and that the shear deformation of the middle surface is zero. The fundamental relationships are derived geometrically and on the basis of the Lagrange variational principle, using the expression for the potential energy of the bar. The normal and shear stresses are determined and the differential equation of constrained torsion is solved. Particular cases considered

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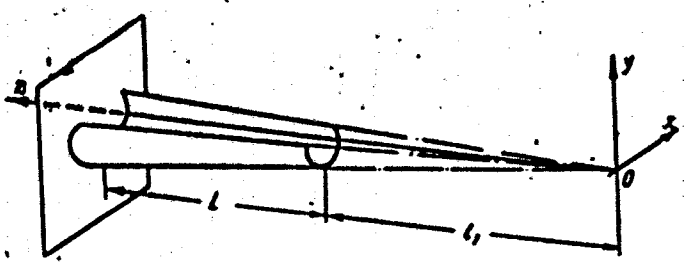
25828 S/535/60/000/130/003/007
E081/E335

Calculation of ....

include the torsion of thin-walled conical bars and the determination of the stresses in a conical bar, the wall thickness of which is either constant or varies according to a linear law.
There are 22 figures and 9 references: 8 Soviet and 1 non-Soviet.

Fig. 1:



Card 2/2

ZHARLIKOV, Nikolay Vasil'yevich; KLIMOV, V.I., insh., retsenzent; ROZIN, A.E., insh., red.; DUGINA, N.A., tekhn.red.

[Multipurpose cutting tools] Kombinirovannye rezhushchie instrumenty. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1961. 76 p. (MIRA 14:6)
(Metal-cutting tools)

39775
S/147/62/000/002/003/020
E191/E535

AUTHOR: Klimov, V.I.

TITLE: The effect of gyroscopic moments due to the power plants on the dynamics of an aircraft

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.2, 1962, 15-22

TEXT: One of the most important simplifying assumptions adopted in the solution of the free flight equations of an aircraft to determine its stability and control behaviour is examined, namely, that of the independence of the longitudinal (symmetrical) and transverse groups of motions. The aircraft is considered a rigid body. A violation of the independence assumption is possible in principle through aerodynamic coupling, inertia coupling, and gyroscopic moments. If the undisturbed motion is symmetrical and the aircraft is aerodynamically symmetrical, only gyroscopic moments remain. Although the moments of inertia of power plant rotors in turbo-jet aircraft are smaller than in propeller aircraft, the present tendency to ignore gyroscopic moments is criticised. Owing to the high speed of jet turbines, the gyroscopic moments are not much smaller than

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those due to propellers. The total balance of moments of an aircraft at high altitude is on a lower level. This is illustrated in graphs showing the reduction of the static and damping moments with the drag coefficient and the altitude, whilst the gyroscopic moments remain constant. The equations of the disturbed motion are formulated, using the method of small perturbations. Solutions obtained with analog computers are shown. For example, a sudden change in the angle of attack causes a disturbed motion with slip. A periodic displacement of the elevator, causes both longitudinal and transverse oscillations of the aircraft. It is concluded that gyroscopic moments cause the dynamic properties of the aircraft to deteriorate substantially. In certain cases, special automatic means for the aerodynamic compensation of gyroscopic moments are justified. Both the design parameters of the aircraft and of the power plant and the conditions of flight are important factors in determining the coupling between the symmetrical and nonsymmetrical motions of the aircraft due to gyroscopic moments. There are 5 figures.

ASSOCIATION: Moskovskiy aviatsionnyy institut, Kafedra 109
(Moscow Aviation Institute, Department 109)
SUBMITTED: October 4, 1961

KLIMOV, Valeriy Ivanovich; GORELOV, V.M., inzh., red.; DUGINA, N.A., tekhn. red.

[Materials for metal-cutting tools] Materialy reshushchikh instrumentov. Izd.4., Pod red. V.M.Gorelova. Moskva, Mashgiz, 1962. 45 p. (Nauchhno-populiarnaia biblioteka rabochego-stanochnika, no.5) (MIRA 16:5)
(Metal cutting tools)

KLIMOV, V.I.; TROFIMOVA, Ye.I., kand. tekhn. nauk, retsenzent

[Cutting gear wheels] Narezanie zubchatykh koles. 2. izd. Moskva, Izd-vo "Mashinostroenie," 1964. 60 p.
(MIRA 17:8)

KLIMOV, V.I.

Woodpulp and stock slushing in a pump with inclined disc. Trudy LTITSBP no.13:101-104 '64. (MIRA 18:2)

VILYANSKIY, I.M.; KLIMOV, V.I.

Photo attachment for a rectoromanoscope. Zhur.mikrobiol. epid. i immun. 31 no.3:124-126 Mr '60. (MIRA 14:6)
(PROCTOSIGMOIDOSCOPY--EQUIPMENT AND SUPPLIES)

KRINITSIN, Mikhail Isaakovich; KLIMOV, Vyacheslav Ivanovich; KOMAROVA, L.S., red.; DEMIDOV, Ya.F., tekhn. red.

[Pipe laying in rocky soil: earthwork] Prokladka truboprovodov v skal'nykh gruntakh; zemlianye raboty. Moskva, VNIIST GLAVGAZA SSSR. Redaktsionno-izdatel'skii otdel, 1961. 53 p. (MIRA 14:11)
(Pipe) (Earthwork)

KLIMOV, V.I., inzh.

Earthwork operations in rocky soil. Stroi. truboprov. 6 no.6: 19-20 Je '61. (MIRA 14:7)
(Krasnodar Territory--Earthwork)

KLIMOV, V.I.

Effect of gyroscopic moments due to the power plant on the dynamics of an aircraft. Uzv.vys.ucheb.zav; av.tekh. 5 no.2:15-22 '62. (MIRA 15:7)

1. Moskovskiy aviatsionnyy institut, kafedra 109.
(Stability of airplanes)

KLIMOV, V. K.

1

Fuel

[illegible]. Development of method for obtaining road surfacing bitumen from Volga shale tar. V. K. Klimov et al. Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk [illegible]. Raw material for lab experiments was shale tar fraction with b.p. >330° C, d_{20} 1.004; this was air-blown at 170°-180° C, effect of blowing rate and duration studied. Material obtained had (as compared with feed) m.p. (R. & B.) 36°-46° (? [illegible]) (20° C), asphaltenes 12-24% (11%), resins 23-30% (31%), oil 19-25% (60%). Tests on blown bitumen after heating (5 hr, 163° C) showed little change, indicating good stability, as against feed which showed considerable change. Tests on asphalt-concrete mixes (bitumen [m.p. 42°-44° C] 7.6%, sand 74%, limestone 18.2%) were satisfactory; results given on plant-produced material after one month use as road surfacing.
V. B.

KLIMOV, V.L.; BAKHTIN, Yu.I.; IVANOVA, G.V.

Approximation of tables for thermodynamic functions of individual substances. Izv. vys. uchab. zav.; khim. i khim. tekh. 8 no.1:168-169 '65. (MIRA 18:6)

KLIMOV, V. N. DECEASED 1961/1

o. 1962

PHYSICS

SEE ILC

L 41250-65 EWP(k)/EWP(z)/EWA(c)/EWT(m)/EWP(b)/EWA(d)/EWP(t) Pf-4 MJW/JD/HW
ACCESSION NR: AP5004237 S/0145/64/000/012/0161/0171

AUTHOR: Klimov, V. N. (Aspirant)

TITLE: Hot rolling of a bimetal sheet with a thick copper coating

SOURCE: IVUZ. Mashinostroyeniye, no. 12, 1964, 161-171

TOPIC TAGS: bimetal sheet, copper coating, hot rolling, metal deformation

ABSTRACT: Hot rolling of four-layer copper-steel-steel-copper sheets was investigated under laboratory and semi-industrial conditions. Specimens (32 x 32 x 120-200 mm for laboratory and 32 x 32 x 250 and 32 x 150 x 250 mm for semi-industrial rolling) containing 50% Cu in each case were made up from unbonded Cu and steel sheets and steel sheets with a Cu coating melted onto the sheets at 1200C. The specimens were hot-rolled at 900-800C (at speeds of 0.7-2.8 m/sec using rolls of 340, 450 and 700 mm diameter), heat-treated at 670-720C, separated into two Cu-steel sheets (heat-resistant separator between steel sheets during rolling) and subjected to various tests. The deformation data obtained for hot rolling in a 450-mm diameter press (at 2.8 m/sec) is summarized in a table. It was found that for the unbonded sheet packages sufficient adhesion could be obtained by two passes (50% compression) at 900-950C. A batch of specimens made from steel 10 and copper MZS

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L 41250-65
ACCESSION NR: AP5004237

sheets was also hot-rolled under industrial conditions as described by the author (Izgotovleniye i ispytaniye opytnoy partii bimetallicheskogo lista s tolstym mednym pokrytiyem, Tekhotchet, NIS, IPI, 1963). The rolling conditions, deformations, and mechanical properties of these specimens are tabulated. It was found that: a) hot rolling of Cu-steel-steel-Cu sheet combinations at the above conditions gives satisfactory bimetal sheets with copper coatings of up to 50% of thickness; b) the optimum conditions appear to be a minimum of 5 passes at 950C with a deformation of at least 50% during the first two passes; c) the Cu-steel-steel-Cu combination has several advantages over the Cu-steel bimetal rolling process. Orig. art. has: 6 figures, 5 tables, and 1 formula.

ASSOCIATION: Irkutskiy politekhnicheskiy institut (Irkutsk Polytechnical Institute)

SUBMITTED: 04Jan64 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 008 OTHER: 000

Card 2/2

PROKHORIN, A.P.; KLIMOV, V.N.; MUSINOV, N.V., otv.red.; PEVZNER, A.S., sav.red.izd-va; OSENKO, L.M., tekhn.red.

[Uniform time and pay standards for construction, assembly, and repair operations in 1960] Edinye normy i rastsenki na stroitel'nye, montazhnye i remontno-stroitel'nye raboty, 1960 g. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Sbornik 18. [Gardening and landscaping] Sadovo-parkovye raboty. 1960. 36 p. (MIRA 13:6)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. TSentral'noye normativno-issledovatel'skoye byuro (TsNIB) Ministerstva kommunal'nogo khozyaystva RSFSR (for Klimov).
(Wages) (Gardening)

KLIMOV, V.N., kandidat meditsinskikh nauk

Indications and contraindications for surgery in acute cholecystitis. Sov.med. 20 no.10:55-60 O '56. (MLRA 10:1)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - chlen-korrespondent Akademii meditsinskikh nauk SSSR prof. A.T.Lidskiy) Sverdlovskogo meditsinskogo instituta.
(CHOLECYSTITIS, surg.
indic. & contraindic. in acute stage)

KLIMOV, V.N., kandidat meditsinskikh nauk (Sverdlovsk)

Comparative data on late results of surgical treatment in cholecystitis. Klin.med. 35 no.5:99-107 My '57. (MLRA 10:8)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki prof. A.T.Lidskiy) Sverdlovskogo meditsinskogo instituta

(CHOLECYSTITIS, surg.
follow-up)

KLIMOV, V.P. (Khar'kov); MANZYUK, L.N. (Khar'kov)

Methods for making straight-pin teeth from stainless steel with plastic facing. Probl. stom. 3:417-418 '56 (MLRA 10:5)
(DENTAL PROSTHESIS)

KLIMOV, VASILIY PAVLOVICH

5478/5
735.922
.K6

Kamskaya GES; Populyarnyy Ocherk
(The Kama River Hydro-Electric Power Station)
Molotov, Molotovskoye Knizhnoye Izd-Vo, 1956.
96 p., Illus., Diagrs.

MEA

KLIMOV, Vasiliy Pavlovich; VAGNER, N.N., red.; LAPKUN, K.I., tekhn.red.

[Kama Hydroelectric Power Station; popular study] Kamskaia GES; populiarnyi ocherk. Molotov, Molotovskoe knizhnoe izd-vo, 1956. 96 p. (MIRA 14:4)
(Kama Hydroelectric Power Station)

KLIMOV, V.

Results of the competition for the best rationalizing suggestion
Radio no.12:25-26 D '55. (MIRA 9:4)
(Radio--Apparatus and supplies)

KLIMOV, V.P.

PRIYMA, Sergey Grigor'yevich; KLIMOV, V.P., otvetstvennyy redaktor; NOVIKOVA, N.S., redaktor

[Efficient work with cables having nonmetallic casings] Ratsionalizatsiia rabot s kabelem, imeiushchim nemetallicheskuiu obolochku. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1956. 22 p. (MLRA 10:4)
(Electric cables)

KLIMOV, V.

Results of the competition. Radio no.10:28-29 '56.

(MLRA 9:11)

(Radio, Shortwave--Competitions)

Klimov, V.P.

TSUPRIKOV, Aleksandr Yefimovich; KLIMOV, V.P., otvetstvennyy red.; MASHAROVA, V.G., red.; NITTSBROER, E.V., tekhn.red.

[New devices and instruments for splicing cables] Novye prisposobleniia i instrument dlia srashchivaniia kabelia. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1958. 42 p. (MIRA 11:5)
(Cables)

SOV/111-58-2-19/27

AUTHORS: Rozenberg, Ya.G. and Klimov, V.P., Engineers

TITLE: A Universal Machine for Building and Repairing Underground and Open Air Wire Broadcast and Communication Lines (Universal'naya mashina dlya stroitel'stva i remonta podzemnykh i vozdushnykh liniy radiofikatsii i VRS)

PERIODICAL: Vestnik svyazi, 1958, Nr 2, pp 24 - 25 (USSR)

ABSTRACT: The authors describe a universal machine which may be used for laying underground cables and building or repairing above ground communication lines. This self-propelled machine was designed by I.A. Kanivets and Ye.Ye. Makarov, both of Frunze. The 40 HP engine will move the vehicle, drive the earth auger and the crane for setting telephone poles, and the cutter for digging cable ditches. The machine has been tested with good results, but some of its parts must be improved. There are one diagram and one photo.

Card 1/1

KLIMOV, V.P., insh.; DOGADIN, V.N., insh.

Competition of communication workers. Izobr. v SSSR 3 no.3:45-46 Mr '58. (MIRA 11:3)
(Telecommunication--Employees)

ROZENBERG, Ya.G., insh.; KLIMOV, V.P., insh.

Universal machine for building and repairing subterranean and overhead radio lines and district-wide communication lines. Vest. svriazi 18 no.2:24-25 F '58. (MIRA 11:2)
(Electric lines--Equipment and supplies)

AUTHORS: Rozenberg, Ya.G., Klimov, V.P., Engineers SOV/111-58-12-31/38

TITLE: Results of the 1957-1958 Competition for the Best Suggestions in the Field of Radio Relay and Intra-Rayon Communications (Itogi konkursa 1957-1958 gg. na luchshiye predlozheniya v oblasti radiofikatsii i VRS)

PERIODICAL: Vestnik svyazi, 1958, Nr 12, pp 34-35 (USSR)

ABSTRACT: The article contains some of the more interesting suggestions made by Russian communication employees during 1957-1958: B.Ya. Gertsenshteyn, Leningrad, developed in cooperation with workers from NIITS a model of a transistorized condensing apparatus for subscriber telephone lines. N.N. Pavlov, Leningrad, suggested to use new tubes for the output stages of wire broadcast amplifier stations. There are many other communication workers who also submitted valuable suggestions for improving technical equipment. They received various awards for their work. There are 3 diagrams and 1 table.

Card 1/1

KOROVAYKOV, Aleksandr Aleksandrovich; KOROTIN, Aleksandr Ivanovich; KLIMOV, V.P., otv.red.; BASHCHUK, V.I., red.; KLUTSKIN, A.A., tekhn.red.

[Elimination of idle time in the operation of rediffusion stations] Likvidatsiia prostoev radiouzlov. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 13 p. (MIRA 13:4)

1. Nachal'nik Ivanovskoy direktsii radiotranslyatsionnoy seti (for Korovaykov). 2. Nachal'nik Kemerovskoy direktsii radiotranslyatsionnoy seti (for Korotin).
(Radio stations)

6(0) SOV/107-59-2-52/55

AUTHOR: Rozenberg, Ya. and Klimov, V.

TITLE: Summing-Up the Communications Contest (Itogi konkursa svyazistov)

PERIODICAL: Radio, 1959, Nr 2, p 61 (USSR)

ABSTRACT: The last contest in 1957-58, for the best suggestions in the field of television reception, radiofication and intraregional telephone communication, carried out by the Ministerstvo svyazi SSSR (USSR Ministry of Communication), was successful. The following participants were awarded: S. Sher, L. Zass, G. Pyatigorskiy and A. Smilyanskiy (engineers from the television repair shop Nr 33 in Kiyev) presented a device for adjusting video and audio channels and checking all receiver parts at home; B. Khilichenko presented a universal testing device ("UIS-3") for checking kinescopes, tubes, output transformators of line scanning and vertical sweep, focusing and deflecting systems,

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PTP units, loudspeakers, chokes, resistance etc.; A. Konstantinovskiy, R. Lipkin and V. Kruller developed the circuit and design of a device for checking qualitative and quantitative indices of television receivers; L. Kevesh (Moscow) presented a device to check the contrast, definition and linearity of television images; M. Vite (Moscow) presented a universal device for control of television program throw-over switch units.

KLIMOV, V.P.; ROZENBERG, Ya.G.; TUDOROVSKIY, V.P., otv.red.; NOVIKOVA, Ye.S., red.; KARABILOVA, S.F., tekhn.red.

[Suggestions of efficiency experts on wire-broadcasting networks and electric communications within districts] Ratsionalizatorskie predlozheniia po vnutriraionnoi elektrosviazi i radiofikatsii. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 55 p. (MIRA 14:3)

(Wire broadcasting) (Telecommunication)

KLIMOV, V. S.

KLIMOV V. S.

Shaumyan-Hospital, Baku. Sravnitelnaya otsenka magnezialnovo i kaltsievovo metodoo opredeleniya skorosti krovotoka

A comparison of the magnesium sulphate and calcium chloride methods for determination of the rate of circulation of the blood

Klinitcheskaya Meditsina 1947, 25/6 (63-64)

4976 The circulation rate of 96 patients was determined by these two methods, which gave practically the same results.

Francke - The Hague

SO: Section II Vol. 1^2 No 7-12

PATEYEVA, M.N.; KLIMOV, V.S.; GORBARENKO, N.I.; DENISOVA, Ye.A.; ERINA, Ye.V.; OSTAPKOVICH, V.Ye.

Early diagnosis of chronic radiation sickness. Vest.rent. i rad. no.2:16-23 Mr-Ap '55. (MLRA 8:5)

1. Is Instituta terapii AMN SSSR (dir. deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. A.L.Myasnikov)
(RADIATION SICKNESS, diagnosis)

USSR/Human and Animal Physiology. The Effects of Physical Efforts. T

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93746.

Author : Stepanyan, Ye. P., Klimov, V.S., Gorbarenko, N.I.
Inst : LAB of Biophysics, INST of Therapy Amn USSR
Title : The Problem of Hyaluronidase and Histamine in the Blood of Individuals Subjected to Ionizing Radiation in Industry.

Orig Pub: Med. radiologiya, 1957, 2, No 3, 19-23.

Abstract: The amount of hyaluronidase (I) in the serum and histamine (II) in the plasma of people (21) periodically subjected to the effect of γ - and β -radiation 5 times or more higher than a safe dose (group I), people (21) subjected to the effect within a safe range (group II), and people (15) who received doses lower than safe but having contact with chemically toxic

Card : 1/2

KLIMOV, V.S.

STEPANYAN, Ye.P.; KLIMOV, V.S.; GORBARENKO, N.I.

Hyaluronidase activity in the blood serum of men subjected to chronic irradiation; preliminary report [with summary in English]. Vest.rent. i rad. 32 no.1:19-23 Ja-F '57. (MLRA 10:6)

1. Is laboratorii Instituta terapii Akademii meditsinskikh nauk SSSR (dir. - deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. A.L.Myasnikov)

(RADIATIONS, eff.
ionizing, chronic irradiation, eff. on hyaluronidase activity in blood)
(HYALURONIDASE, in blood
eff. of chronic ionizing irradiation)

FATKIEVA, M.N.; KLIMOV, V.S.; PONIZOVSKAYA, A.I.; GORBARENKO, N.I.; SOKOLOV, V.V.; SMIRNOVA, M.I.

Effect of Cs^{137} on the human organism. Med.rad. 5 no.7:14-19 '60. (MIRA 13:12)
(RADIATION—PHYSIOLOGICAL EFFECT) (CESIUM—ISOTOPES)

KRASNOSEL'SKIY, M.A.; KLIMOV, V.S.; LIFSHITS, Ye.A.

Convergence of positive functionals and operators. Dokl. AN SSSR 162 no.2:258-261 My '65. (MIRA 18:5)

1. Voronezhskiy gosudarstvennyy universitet. Submitted December 1, 1964.

KLIMOV, V.T.; MARICHEV, V.I.; RUBINCHIK, A.M.; EYLER, S.A., nauchn. red.; ZVORYKINA, L.N., red.; BOROVNEV, N.K., tekhn. red.

[Construction of cofferdams and caissons] Stroitel'stvo opusknykh kolodtsev i kessonov. Moskva, Gosstroiizdat, 1963. 247 p. (MIRA 17:1)
(Cofferdams) (Caissons)

KLIMOV, V.T., inzhener.

Lowering the water level with borehole filter pumps having horizontal receivers. Gidr. stroi. 26 no.5:36-37 My '57. (MLRA 10:6)
(Pumping machinery)

KLIMOV, Vladimir Timofeyevich, inzh.; KASITSYNA, K.N., inzh., red.

[The driving of piles by crane-excavators and cranes with pile-driver jibs; practices of the State All-Union Trust for the Reinforcement of Foundations and Structures"] Zabivka svai kranami-ekskavatorami i kranami s podvesnymi kopravymi strelami; opyt tresta "Gidrospetsfundamentstroi." Moskva, Stroiizdat, 1964. 33 p. (MIRA 17:12)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.
2. Nachal'nik tekhnicheskogo otdela "Gidrospetsfundamentstroy" (for Klimov).

Klimov, V.V.

USSR/Inorganic Chemistry. Complex Compounds. C

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26502.D.

Author : Klimov, V.V.
Inst : Academy of Sciences of Kazakh SSR, Institute of Chemistry.
Title : Electrolytic Dissociation of Complex Compounds of Four-Valent Tin and Three-Valent Antimony.

Orig Pub : Avtoref. diss. kand. khim. n., In-t khim. nauk AN KazSSR, Alma-Ata, 1956.

Abstract : No abstract.

Card 1/1

KLIMOV, V.

AUTHOR USANOVICH, M., KLIMOV, V., and SUMAROKOVA, T.,

TITLE
On the Electrolytic Dissociation of Tin and Antimony Complex Compounds.
(Ob elektroliticheskoy dissotsiatsii kompleksnykh soyedineniy olova i sur'my - Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 2, pp 364-365, (U.S.S.R.)
Received 6/1957 Reviewed 7/1957

ABSTRACT The development of electro-conductivity in systems that consists of non-conductive components is connected with a reciprocal acid-basic effect. As a result of the latter complex, saline compounds develop. On the occasion of the mixing of halides of quadrivalent tin and trivalent antimony with monocarbon acids of the aliphatic series and with their composed ethers electrolyres according to a general formula develop: $SnX_4 \cdot 3RCOOR'$, $SnX_4 \cdot 4RCOOR'$, SbX_3RCOOR', $2SbX_3RCOOR'$, where R' denotes hydrogen or an aliphatic radical, and X denotes Cl or Br. The way of the electrolytic dissociation is shown in 4 reaction formulae (1-4) or equations respectively. From the equations 1. and 2. it becomes manifest that in the compounds $SnX_4 \cdot 3RCOOR'$ and $SnX_4 \cdot 4RCOOR'$ the organic molecule is a component of the cation and of the anion, whereas the halide of the quadrivalent tin only appears in the cation (equation 3 and 4). For the purpose of examing the shemes of the electrolytic dissociation tin chloride was investigated in methanol, acetic

Card 1/3

SHCHERBOV, Dmitriy Pavlovich; KLIMOV, Vsevolod Valentinovich;
POPLAVSKAYA, I.A., otv.red.; CHASOVIKOVA, Z.I., tekhn.red.

[Photometric titration in the analysis of minerals] Fotometricheskoe titrovanie v analize mineral'nogo syr'ia. Alma-Ata, TSentr.in-t nauchno-tekhn.informatsii, 1958. 15 p.
(MIRA 13:9)
(Minerals) (Magnesium--Analysis) (Calcium--Analysis)

S/079/60/030/04/64/080
B001/B011

AUTHORS: Klimov, V., Sumarokova, T., Usanovich, M.

TITLE: On the Structure of the Complex Compound $SnCl_4 \cdot 2CH_3COOH \cdot 2NH_2CH_2COOH$

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1334-1336

TEXT: The complex compound $SnCl_4 \cdot 2NH_2CH_2COOH \cdot 2CH_3COOH$ (Ref. 1) was separated upon the action of tin chloride on the solution of glycocoll in anhydrous acetic acid. The same complex compound was also obtained by the addition of two molecules CH_3COOH to the complex acid $SnCl_4 \cdot 2NH_2CH_2COOH$. The cryoscopic determinations of the molecular weight of the compound $SnCl_4 \cdot 2NH_2CH_2COOH \cdot 2CH_3COOH$, made in CH_3COOH, showed that the molecular weight determined constitutes 1/3 of the formula molecular weight, and thus, that this compound dissociates into three ions. On the strength of these data, the mixed complex compound was assumed to appear as the product of an acid-basic reaction of the complex acid $SnCl_4 \cdot 2NH_2CH_2COOH$ with CH_3COOH and the latter,

On the Structure of the Complex Compound $SnCl_4 \cdot 2CH_3COOH \cdot 2NH_2CH_2COOH$

S/079/60/030/04/64/080
B001/B011

with its clear basic properties, to add on in the outer sphere (Ref. 1). Structure $[SnCl_4(NH_2CH_2COO)_2]^{--} \cdot 2CH_3COOH_2^+$ was therefore ascribed to compound $SnCl_4 \cdot 2NH_2CH_2COOH \cdot 2CH_3COOH$. To obtain a confirmation of this assumption, the authors decided to investigate the ion transfer in the acetic acid solutions of compound $SnCl_4 \cdot 2NH_2CH_2COOH \cdot 2CH_3COOH$, by utilizing the labelled preparations $NH_2CH_2C^*OOH$ and CH_3C^*OOH. They expected that glycocoll, a component of the anion $[SnCl_4 \cdot (NH_2CH_2COO)_2]^{--}$, would move to the anode, and CH_3COOH to the cathode, on the action of electric current. It was found, however, that glycocoll, labelled with the isotope C^{14}, moves to the cathode, i.e. it is a component of the cation; CH_3COOH labelled with the isotope C^{14} goes mostly over to the anode, and is therefore a component of the anion. The complex compound has therefore the structure: $[SnCl_4(CH_3COO)_2]^{2-}(NH_3CH_2COO)_2^+$. There are 1 table and 3 Soviet references.

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On the Structure of the Complex Compound $SnCl_4 \cdot 2CH_3COOH \cdot 2NH_2CH_2COOH$

S/079/60/030/04/64/080
B001/B011

ASSOCIATION: Institut khimii Akademii nauk Kazakhskoy SSR (Institute of Chemistry of the Academy of Sciences, Kazakhskaya SSR)

SUBMITTED: May 6, 1959

Card 3/3

KLIMOV, V.V.

Infrared spectrometry of inorganic substances. Zav.lab. 27 no.3:292-294 '61. (MIRA 14:3)

(Spectrum, Infrared)

S/081/62/000/022/009/088
B177/B186

AUTHORS: (3) Kagarlitskaya, N. V., (4) Klimov, V. V., Kagarlitskaya, N. V., Shcherbov, D. P.

TITLE: Infra-red spectrometry of inorganic substances.
(3) The preparation of solid specimens for quantitative determination.
(4) Absorption spectra of some silicate minerals in the 2-15 micron range

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 115-116, abstract 22D26 (Tr. Kazakhsk. n.-i. in-ta mineral'n. syr'ya, no. 3, 1960, 308-311; 312-317)

TEXT: (3) A study was made of the conditions under which tablets of the substances to be analyzed could be obtained in a mixture with KBr, and which could be used for recording IR absorption spectra of solid substances. It was noted that the following conditions should be observed in order to obtain high-grade tablets: the KBr and the substance to be analyzed should be dry and crushed to a particle size of ≤ 5 μ; before pressing the tablets, the air should be pumped out for 5-7 min, and

Card 1/4

pressing should be performed at a pressure of 5-6 t/cm^2. If particle size greatly exceeds 5 μ, the form of the absorption bands is distorted. However, in the method of pressing the tablets the effect of large particles is less apparent than when depositing the substance on to transparent plates of NaCl or KBr. At low pressures, the tablets obtained are opaque and rapidly crack. If they are pressed without a vacuum under low pressure, the tablets crack when the load is released through the expansion of air contained in the powder. If KBr or the substance to be analyzed are used with an excessive moisture content, opaque tablets are produced. (4) IR absorption spectra in the 2-15 μ range (on a single-beam spectrometer) were obtained for the following 32 minerals in the form of pressings with KBr: zircon, thorite, olivine, fayalite, topaz, disthen, andradite, vesuvianite, titanite, axinite, calamine, epidote, orthite, beryl, chrysocolla, tourmaline, diopside, hedenbergite, spodumene, anthophyllite, wollastonite, radusite-asbestos, talc, phlogopite, muscovite, sericite, penninite, nepouite, dickite, orthoclase, microcline, and lazurite. A diagram shows the positions of the absorption bands in the IR-absorption spectra of the above minerals. No simple regularity or arrangement of the absorption bands were observed in the spectra of

minerals in the same sub-class, nor any substantial differences between the spectra of different sub-classes. Minerals having the same chemical composition, and which do not crystallise in different syngonies, have different spectra. An analytical scheme is proposed for identifying a silicate which is to be determined, from the IR absorption spectra of minerals previously investigated. For this purpose, the schematic spectra of the minerals are arranged, according to a formal feature of the appearance of their spectra, into two groups: those of minerals containing water, and those containing no water. The minerals are arranged within each group in increasing order of the number of absorption bands in their spectrum. If the number of bands is the same, the first spectrum is that of the mineral whose first band has the shortest wavelength. A given mineral is identified by obtaining its IR absorption spectrum (2-15 μ), and by finding the principal absorption bands in it. Should the spectrum contain a large number of bands, it is diagrammatically drawn on tracing paper to the same scale as the diagram of the spectra of the known minerals. The tracing paper is then laid over the diagram of spectra of the known minerals, and by moving it along the diagram, the minerals are found whose absorption bands correspond to the spectrum of the mineral

Infra-red spectrometry of ...

under investigation. The proposed system can be employed both to identify unknown specimens of a single mineral and to discover similar IR absorption spectra for minerals in different sub-classes. For Part 2, see RZhKhim, 1960, no. 18, 72262. [Abstracter's note: Complete translation.]

Card 4/4

S/058/63/000/003/033/104
A062/A101

AUTHORS: Klimov, V. V., Kagarlitskaya, N. V., Shcherbov, D. P.

TITLE: Infrared spectrometry of inorganic substances. 4. Absorption spectra of some silicate minerals in the range of wavelengths from 2 to 15 microns

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 41, abstract 3D278 ("Tr. Kazakhsk. n.-i. in-ta mineral'n. syr'ya", 1960, no. 3, 312 - 317)

TEXT: Absorption spectra of 32 silicate minerals of various subclasses were obtained in the range of wavelengths 2 - 15 μ and their characteristic frequencies are represented schematically. An analytic method is proposed for identification of silicate minerals on the basis of infrared absorption spectra of their powders. For Part 3 see RZhFiz, 1962, 10B220.

[Abstracter's note: Complete translation]

Card 1/1

L 43040-66 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) WH/JD

ACC NR: AP6029821 SOURCE CODE: UR/0363/66/002/008/1483/1486

53 52 B

AUTHOR: Klimov, V. V.; Kozachenko, V. N.; Didkovskaya, O. S.; Zvonik, V. A.; Kiseł', T. P.; Andreyev, A. Ya.

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity Substances, Donets Branch (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh veshchestv, Donetskiy filial)

TITLE: Preparation of piezo- and ferroelectric ceramics using spray dried solutions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1483-1486

TOPIC TAGS: peizoelectric ceramic, ferroelectric material, ceramic technology, ceramic product property, barium titanate, titanate, lead, calcium

ABSTRACT: A preparative method was described for piezo- and ferroelectric ceramic materials on the base of triple titanate of barium, lead, and calcium. The method was designed to replace the conventional ceramic sintering technique in view of its substantial disadvantages. The first step of the described method consisted of preparation of the finely dispersed (particle size 6—8 μ) powder of the basic barium, lead, and calcium nitrates by spray drying of their aqueous solutions following a technique invented by the authors [Author Certificate no. 901979-29-14, 21.05.1964]. The powdered nitrates were then converted into titanates of varied

UDC: 666.3:537.226.33+666.3:537.228.1

Card 1/2

L 43040-66

ACC NR: AP6029824

composition by firing the nitrate powder at 900—1000C at which temperature formation of the solid solutions with perovskite structure is completed. The particle size of titanates after firing was about 1 μ. High-purity powders may be obtained from adequately pure starting materials. The sintering of these powders into ceramic products occurs at a temperature in the 1230—1280C range, which is 100—150C lower than the temperature range of sintering the powders produced by conventional ceramic technique. The electrophysical properties of the ceramic products obtained by spray drying were shown to be superior to those of the products of ceramic technology. Notably, the piezoelectric modulus (d_{31}) was comparatively higher and, in certain samples, constant in the -60 to +80C range. Universality of the method described was stressed, insofar as it may be applied to most of the ferro- and piezoelectric ceramics presently used. Orig. art. has: 4 figures and 2 tables. [JK]

SUB CODE: 11/ SUBM DATE: 220ct65/ ORIG REF: 001/ ATD Press 5065

Card 2/2

KLIMOV, V.V.; MAKHODNOVA, A.P.; ZHABKINA, O.M.; MORGACHEVA, N.I.; BRONNIKOV, A.N.

Ferroelectric properties of solid solutions on the basis of barium, lead, and calcium titanates. Izv. AN SSSR. Ser. fiz. 29 no.11:2055-2058 N '65. (MIRA 18:11)

L 7846-66 EWP(e)/EPA(e)-2/EWT(m)/EWP(i)/EPA(w)-2/EWP(t)/EWP(b) IJP(c)
ACC NR: AP5028119 JD/WH SOURCE CODE: UR/0048/65/029/011/2055/2058

AUTHOR: Klimov, V.V.; Nakhodnova, A.P.; Zhabkina, G.M.; Morgacheva, N.I.; Bronnikov, A.N.

ORG: none

TITLE: Ferroelectric properties of barium, lead, and calcium titanate base solid solutions /Report, Fourth All-Union Conference on Ferro-electricity held at Rostov-on-the Don 12-16 September 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2055-2058

TOPIC TAGS: ferroelectric material, solid solution, barium, lead, calcium, titanate, Curie point, lattice parameter

ABSTRACT: The authors have determined the Curie points of 17 barium titanate-rich solid solutions of the barium titanate - lead titanate - calcium titanate system; the study was undertaken in view of the technical importance of the materials and the discordance of the available data on them. Uniform mixtures for synthesis were obtained by spray-drying solutions of barium, lead, calcium, and titanium nitrates. The resulting powders were roasted for 2-3 hours at 1000°C, compressed into 20 mm diameter 1.5-1.8 mm thick disks, and sintered at 1260-1340°C for 1-2 hours. Specimens for which the water absorption was less than 0.55% and the porosity less than 2-3% were selected for investigation. The selected specimens were analyzed, x-ray powder photographs were recorded, and their Curie points were determined within 2°C by di-

Card 1/2

L 7846-66

ACC NR: AP5028119

electric constant measurements. It was found that the Curie point increased with decreasing barium content when either the calcium content, the lead content, or their ratio was held constant. When the barium content was held constant the Curie point increased with increasing lead content. The variation of the Curie point with composition in the region of relatively high calcium content differed from that found by McQuarry (J.Amer.Ceram. Soc., 40, No. 2, 35 (1957)) and T.Ikeda (J.Phys.Soc. Japan, 3, No. 4, 335 (1958)); the present measurements giving the higher Curie points in this region. The solid solutions with the higher Curie temperatures had unit cells with larger volumes and, in agreement with the findings of McQuarry and Ikeda (loc.cit. supra), higher degrees of lattice tetragonality. The increase of the Curie temperature with increasing calcium, decreasing barium, and constant lead content contradicts the current opinion that the Curie temperatures of ferroelectrics with the perovskite structure are increased by increasing the volume and polarizability of the ions at the A-sites in ABO_3 crystals. The discrepancy between the present results and those obtained by other authors with single compounds and binary systems is obviously to be explained by the fact that the laws governing the behavior of three-component systems containing A-type ions with different electronic structures are more complex than those applicable to binary systems. The discovery of these laws will require further investigation. Orig. art. has: 5 figures and 1 table.

SUB CODE: SS, EM SUBM DATE: 00/ ORIG. REF: 003 OTH REF: 006

Card 2/2

KLIMOV, V.V.; [illegible]

Device for measuring hysteresis loop ratios. Izm.tekh. no.9:39-41 S '65. (MIRA 18:10)

KLIMOV, V. V.; DIDKOVSKAYA, O. S.; KOZACHENKO, V. N.

Determination of aluminum with salicylal o-aminophenol in lead salts. Metod. anal. khim.reak. i prepar. no. 4:53-57 '62. (MIRA 17:5)

1. Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

KLIMOV, V.V.; DIDKOVSKAYA, O.S.; KOZACHENKO, V.N.

Fluorescence determination of microgram amounts of aluminum in lead salts. Zav.lab. 28 no.6:652-654 '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv, Donetskiy filial.

(Aluminum--Analysis)
(Lead salts) (Fluorescence)

KLIMOV, V.V.; DIDKOVSKAYA, O.S.

Determination of niobium by the luminescent method. Trudy IREA no.25:195-202 '63. (MIRA 18:6)

KLIMOV, V.V.; DIDKOVSKAYA, O.S.

Use of lumogallion of the Institute of Chemial Reagents for the fluorescence determination of niobium. Zav.lab. 29 no.2:147-148 '63. (MIRA 16:9)

1. Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov.
(Niobium—Analysis) (Fluorescence)

ACC NR: AP6022214 SOURCE CODE: UR/0115/66/000/005/0093/0094

AUTHOR: Klimov, V. V.; Kovalin, Ya. V.

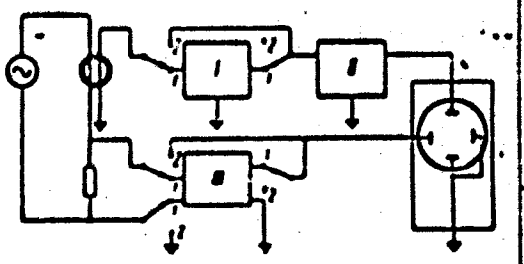
ORG: none

TITLE: Measuring maximum induction of hysteresis loop of ferrite cores by an oscillographic method

SOURCE: Izmeritel'naya tekhnika, no. 5, 1966, 93-94

TOPIC TAGS: magnetic induction, magnetic hysteresis, hysteresis loop

ABSTRACT: A measuring outfit based on the T. H. Bonn et al. method of "subtraction of ideal loop" (Electronics Engg, no. 3, 1958) is briefly described. Operating at 50 cps, the outfit comprises (see figure) an oscillograph, an ideal-loop unit, and a full-wave rectifier. With switches in position 1, inductance is measured; in position 2, the oscillograph shows the hysteresis loop of the test core. The reported error of the outfit is 6--7%. Orig. art. has: 4 figures.



SUB CODE: 09 / SUBM DATE: none

ORIG REF: 002 / OTH REF: 001

Card 1/1 UDC: 621.317.351:621.317.421

L 06406-67 EWT(d)/EWP(l) IJP(c) BB/GG/GD
ACC NR: AT6029232 SOURCE CODE: UR/0000/66/000/000/0187/0190

AUTHOR: Klimov, V. V.; Kovalin, Ya. V.; Maslov, A. P.; Chistov, V. P.

ORG: none

TITLE: A system for data transmission between digital and an analog computer

SOURCE: Vsesoyuznaya konferentsiya-seminar po teorii i metodam matematicheskogo modelirovaniya. 4th. Kiev, 1964. Vychislitel'naya tekhnika v upravlenii (Computer technology in control engineering); trudy konferentsii. Moscow, Izd-vo Nauka, 1966, 187-190

TOPIC TAGS: analog digital converter, computer input unit, tunnel diode, data transmission, data processing, analog digital computer system, digital analog converter, flip flop circuit

ABSTRACT: The new system consists of a single digital to analog converter, a counter C, fed through gate G from the pulse generator GEN. The unknown voltages U_1, $U_2 \ldots U_n$ are applied to the inputs of voltage comparators COM 1, COM 2,...,COM n. A signal from the shift register REG sets the flip flop RR3, which in turn opens the gate G. The pulses flow into counter C, are counted, and fed into the digital computer in binary form. Simultaneously, an analog reference voltage proportional to the number of pulses is generated in the digital to analog converter. This staircase voltage is introduced into the comparators COM 1, through COM n. At the moment that one of the un-

Card 1/2

known voltages becomes equal to the instantaneous value of the reference voltage, a signal from the appropriate comparator triggers one of the FF 1 flip flops. The output pulse from FF 1 sets the corresponding FF 2 flip flop, resets the FF 3, and enters the shift register REG. FF 3 turns off the gate G, thus fixing the instantaneous counter contents. FF 2 generates a pulse which identifies the counter contents with the corresponding input signal (A1, A2...A_n). Timing pulses from the digital computer are fed into input IN 1 of the shift register and used to advance its contents. As soon as the counter information is transferred into the computer, gate G is opened through FF 3 by the shift-register REG and the process continues until the next voltage level coincidence occurs in one of the input comparators. When the counter is completely filled, an impulse from it resets all flip flops FF 1 into their initial state. Tunnel diodes are used in the voltage comparators COM 1 through COM n, as coincidence sensing elements. The comparator circuit and an explanation of its operation are included. The circuit is conventional. Orig. art. has: 5 figures, 4 formulas.

SUB CODE: 09/ SUBM DATE: 12Feb66/ ORIG REF: 003/ OTH REF: 001

L 05830-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6030019 SOURCE CODE: UR/0020/66/169/005/1075/1076

AUTHOR: Bezrukov, V. I.; Lapitskiy, A. V. (Deceased); Klimov, V. V.; Kisel', M. G.

ORG: Donets Branch of the All-Union Scientific Research Institute for Chemical Reagents and High Purity Compounds (Donetskiy filial vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh veshchestv)

TITLE: Heteroniobates of rare earth elements of the cerium- and yttrium subgroups

SOURCE: AN SSSR. Doklady, v. 169, no. 5, 1966, 1075-1076

TOPIC TAGS: niobate, niobium compound, cerium, yttrium, rare earth element

ABSTRACT: Interaction between the aqueous solutions of potassium niobate with the salts of rare earth elements was studied by nephelometric technique. It was found that at the neutral point $Me(OH)(NbO_3)_2$ is formed; Me is a rare earth element. The water-soluble complex of heteroniobates are formed upon dissolving of the $Me(OH)(NbO_3)_2$ in the excess of potassium niobate. It was found that the breaking point on the transparency curve corresponds to Me:Nb=1:2. It was also found that $Me(OH)(NbO_3)_2$ precipitates at pH=6 and that it dissolves at pH=9.2-9.5 and the Me:Nb ratio is 1:9. Two types of thermal effects, endothermic and exothermic, were observed in the curve of calcination of the heteroniobates of the rare earth elements. The general formula of these heteroniobates was found to be $3K_2O \cdot Me_2O_3 \cdot 4Nb_2O_5 \cdot (17.9\text{-}19.8)H_2O$. It was also

UDC: 546.651'882+546.66'882:541.49

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L 05830-67

ACC NR: AP6030019

found that 70% of the crystalline water is lost upon heating to 100-180°C. Final dehydration occurs at 560-610°C. The dehydration was found to be partially irreversible. Presented by Academician I. I. Chernyayev on 14 December 1965. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: 21Sep65/ ORIG REF: 007/ OTH REF: 002

Card 2/2

ACC NR: AP6029031 SOURCE CODE: UR/0413/66/000/014/0042/0042

INVENTORS: Klimov, V. V.; Andreyev, A. Ya.; Nakhodnova, A. P.; Kozachenko, V. N.; Akhkozov, Ye. A.; Ivanov, D. G.; Didkovskaya, O. S.; Zvonik, V. A.

ORG: none

TITLE: A method for obtaining a piezoceramic material. Class 21, No. 183812 [announced by Donets Branch of All-Union Scientific Research Institute of Chemical Reagents and of High Purity Chemicals (Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 42

TOPIC TAGS: piezoelectric ceramic, barium compound, lead compound, calcium compound, titanium compound, sintered alloy

ABSTRACT: This Author Certificate presents a method for obtaining a piezoceramic material from a mixture of barium, lead, calcium, and titanium compounds by sintering this mixture. To lower the temperature of sintering this material, the above compounds are used in the form of nitric acid solutions of barium, lead, calcium, and titanium. This solution is atomized in a stream of air at the temperature of 400—500C. After this, the powder is sintered at the temperature of 800—1000C.

SUB CODE: 11/ SUBM DATE: 21May64

UDC: 621.315.612:537.226.33

Card 1/1

ACC NR: AT6022244 SOURCE CODE: UR/0000/66/000/000/0023/0027

AUTHOR: Klimov, V. V.; Kovalin, Ya. V.;

ORG: Sverdlovsk Department of the Mathematical Institute AN SSSR (Sverdlovskoye otdeleniye matematicheskogo instituta AN SSSR)

TITLE: Electronic counters using tunnel diodes and transistors

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya elektronno-vychislitel'noy tekhniki. Doklady. Moscow, 1966, 23-27

TOPIC TAGS: pulse counter, tunnel diode, flip flop circuit, transistor, differentiating circuit, circuit design, P14 transistor, P403 transistor, P503 transistor, D504 Esaki diode

ABSTRACT: Two counter circuits -- an accumulator and a ring counter: are shown are described. Although they both utilize tunnel diodes, the counting frequency of both is 300 kc. In the first counter (see Fig. 1), trigger flip-flops are formed by low frequency transistors P14 and tunnel diodes with peak current equal to 2.4 ma. For reliable operation, the triggering pulses must be narrow and for this reason the RC differentiator circuits are used for interstage coupling. The second circuit (see Fig. 2) is a ring counter. It consists of tunnel diode flip-flops with transistor amplifiers. Zener diodes are used to prevent transistor saturation. They increase the flip-flop sensitivity threshold and speed up the flip-flop reset action. Two outputs from the ring counter are available: voltage level output from the

Card 1/3

ACC NR: AT6022244

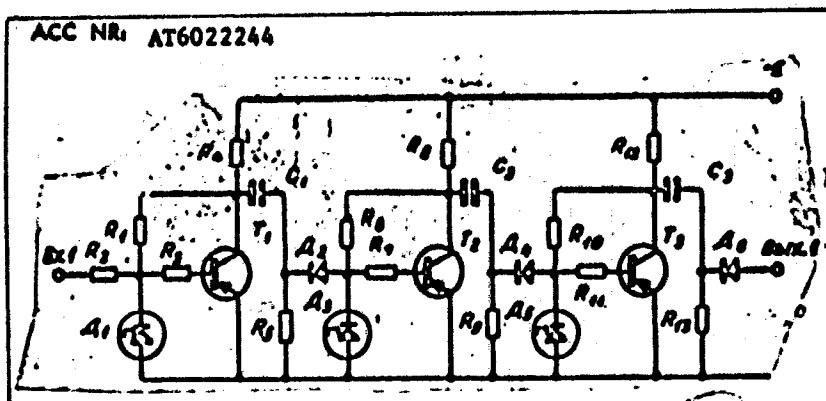


Fig. 1. Accumulator circuit

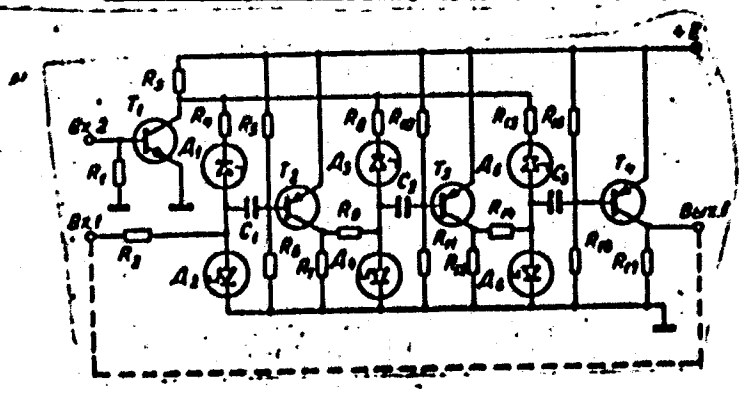


Fig. 2. Ring counter.

Card 2/3

ACC NR: AT6022244

tunnel diodes, and pulse output from transistor collectors. This counter makes use of tunnel diodes with a peak current equal to 5.5 ma, D808 Zener diodes, and P403 and P503 transistors. Orig. art. has: 3 figures. [BD]

SUB CODE: 09/ SUBM DATE: 26Apr66/ ORIG REF: 002

Card 3/3

ACC NR: AP6022002 SOURCE CODE: UR/0120/66/000/003/0095/0097

AUTHOR: Klimov, V.; Kovalin, Ya. V.

ORG: Sverdlovsk Department of the Mathematical Institute, AN SSSR (Sverdlovskoye otdeleniye Matematicheskogo instituta AN SSSR)

TITLE: Electronic counters using tunnel diodes and transistors

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1966, 95-97

TOPIC TAGS: pulse counter, tunnel diode

ABSTRACT: Two counter circuits—an accumulator and a ring counter—whose diagrams are shown are described. Although they both utilize tunnel diodes, the counting frequency of both is 300 kc. In the first counter (Fig. 1), trigger flip-flops are formed by low frequency transistors P14 and tunnel diodes with peak current equal to

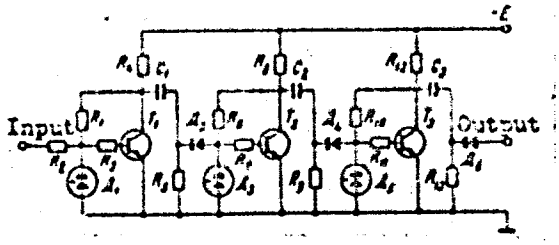


Fig. 1. Accumulator circuit

Card 1/2 UDC: 621.374.32:621.382

ACC NR: AP6022002

2.4 ma. For reliable operation, the triggering pulses must be narrow and for this reason the RC differentiator circuits are used for interstage coupling. The second circuit (Fig. 2) is a ring counter. It consists of tunnel diode flip-flops with transistor amplifiers. Zener diodes are used to prevent transistor saturation. They

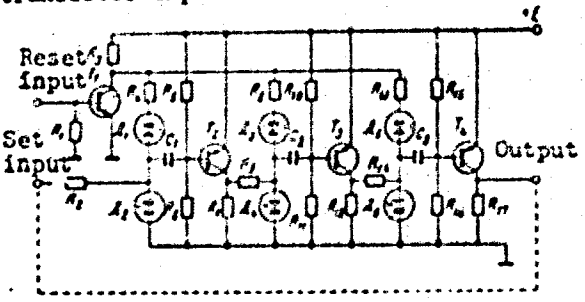


Fig. 2. Ring counter

increase the flip-flop sensitivity threshold and speed up the flip-flop reset action. Two outputs from the ring counter are available: voltage level output from the tunnel diodes, and pulse output from transistor collectors. The counter makes use of tunnel diodes with a peak current equal to 5.5 ma, ZD1 Zener diodes, and P403 and P503 transistors. Orig. art. has: 3 figures. [BD]

SUB CODE: 09/ SUBM DATE: 06May65/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 5053

Card 2/2

L 61633-65 EWT(d)/EED-2/EWP(1) Pq-4/Pg-4/Pk-4 LJP(c) BB/GG/GS
ACCESSION NR: AT5014711 UR/0000/65/000/000/0053/0058

AUTHOR: Klimov, V. V. 25 B+1

TITLE: Tunnel diode memory units with information-preserving information retrieval

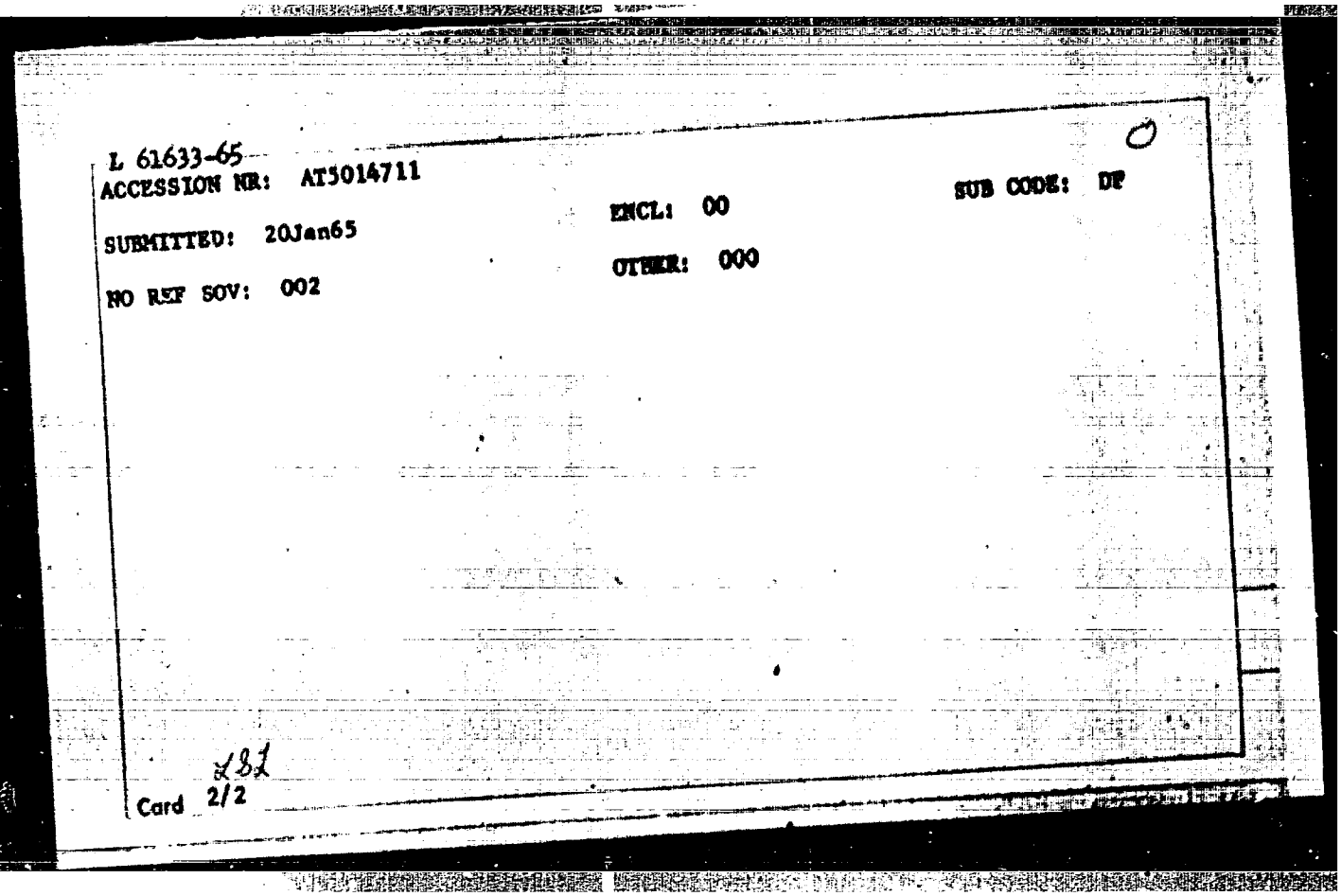
SOURCE: Operativnyye i postoyannyye zapominayushchiye ustroystva (Rapid and non-volatile storage); sbornik statey. Leningrad, Izd-vo Energiya, 1965, 53-58

TOPIC TAGS: two diode memory unit, information preserving memory reading, tunnel diode memory

ABSTRACT: In additon to the known memory cell with information-preserving information retrieval (Sims, Bek, Kamm, Use of tunnel diodes in digital computers, Proceedings of the IRI (translation)1961, v. 49, no. 1), this paper proposes two new alternative memory cells with similar properties based on two tunnel diodes, and discusses various changes in their operative conditions yielding different sensitivities and speeds, and requiring varying amounts of material during their incorporation into larger units. Orig. art. has: 10 formulas and 4 figures.

ASSOCIATION: None

Card 1/2



L 61633-65
ACCESSION NR: AT5014711

SUBMITTED: 20Jan65 ENCL: 00 SUB CODE: DP

NO REF SOV: 002 OTHER: 000

Card 2/2

L 39682-65 EWT(1)/EEC(k)-2/T/EEC(b)-2/EWA(h) Pm-4/Pz-6/Peb/Pj-4 IJP(c)
ACCESSION NR: AP5006044 S/0141/64/007/006/1226/1229

30
29
B

AUTHOR: Klimov, V. V.

TITLE: Tunnel diode circuits for storage units with nondestructive readout

SOURCE: IVUZ. Radiofizika, v. 7, no. 6, 1964, 1226-1229

TOPIC TAGS: tunnel diode storage element, nondestructive readout, computer element

ABSTRACT: Two variants of a tunnel diode circuit for use in storage units with nondestructive readout are examined. The first (Fig. 1 of Enclosure) consists of trigger circuit R_2D_2, with resistor r and self-excited oscillator LD_1 connected in parallel. Hf oscillations arise in the circuit when D_2 is in the low-voltage (1) state. When D_2 is in the high-voltage (0) state, LD_1 functions as a monostable multivibrator. Data are read in the form of half-currents through inputs x and y. To minimize the considerable current drop in D_2, an additional resistor is included in the trigger of the

Card 1/2

L 39682-65
ACCESSION NR: AP5006044

second variant (Fig. 2), and the peak current of D_2 is considerably higher than that of D_1. Depending on the state of the trigger, the flip-flop oscillator is fed by positive or negative pulses at input A. Even with the use of low-quality P-2 diodes, the pulse fronts of the trigger do not exceed 0.01 μsec. In a matrix based on either of these circuits, the readout outputs of cells of the same state are common to a single amplifier, and parallel operation is possible. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Sverdlovskoye otdeleniye Matematicheskogo instituta im. B. A. Steklova AN SSSR (Sverdlovsk Branch, Mathematics Institute, AN SSSR)

SUBMITTED: 09Apr64 ENCL: 01 SUB CODE: EC

NO REF SOV: 001 OTHER: 003

Card 2/3

L 1633-65 EWT(1)/EEC(k)-2/T/EEC(b)-2/EWA(h) Pj-4/Peb/Pm-4/Pz-6 IJP(c)

ACCESSION NR: AP5011893 UR/0120/65/000/002/0179/0180

AUTHOR: Klimov, V. V. 41 B

TITLE: Tunnel diode-transistor controllable circuits 15

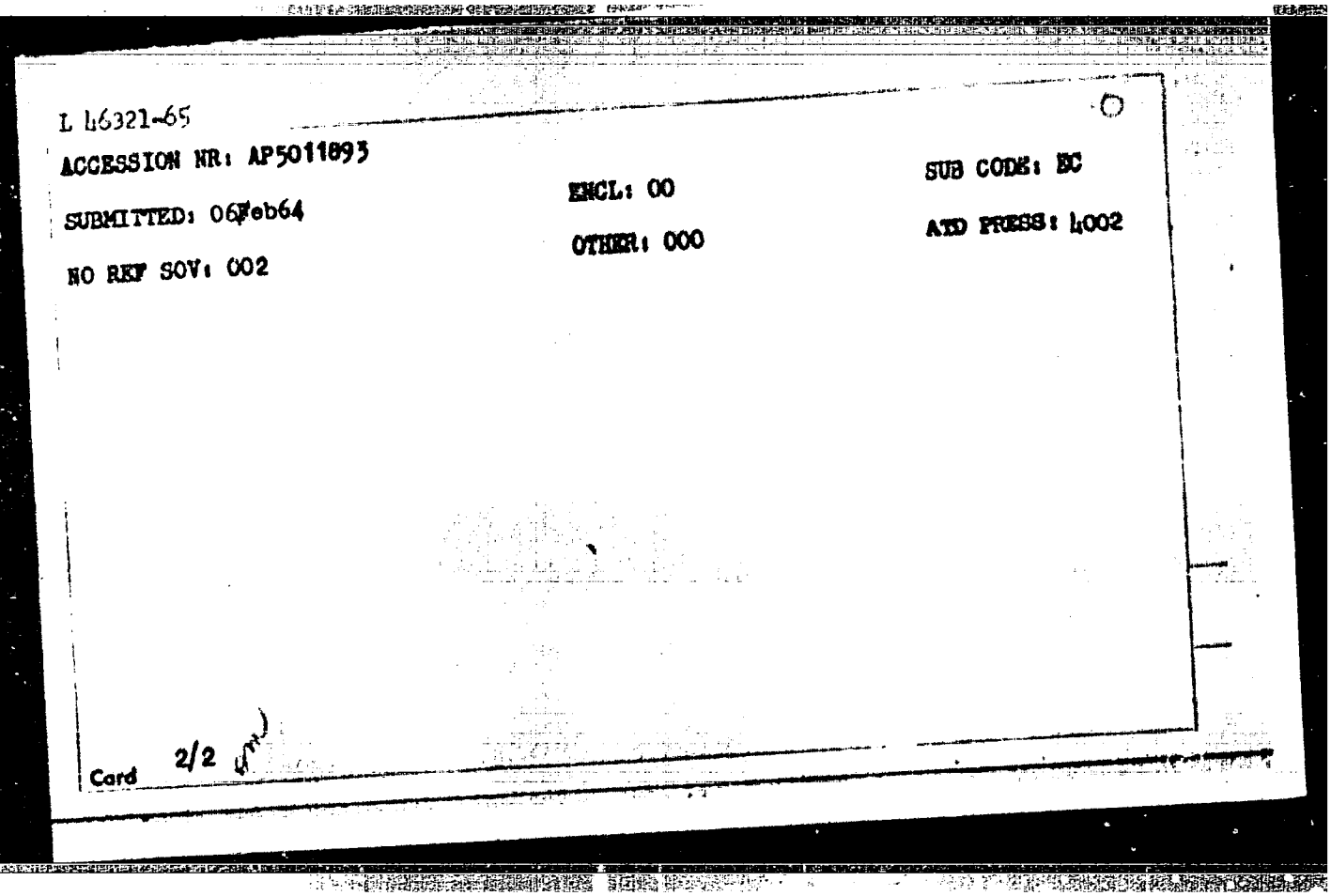
SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1965, 179-180

TOPIC TAGS: tunnel diode, transistor

ABSTRACT: Two types of tunneldiode-transistor circuits whose mode of operation can be controlled by a pulse are considered. One circuit operating as an oscillator and a single-shot multivibrator was tested experimentally with an R2 tunnel diode (peak current, 2 ma) and a P403 transistor (20 v). Another circuit — a trigger and a single-shot multivibrator — uses the same R2 tunnel diode and P410 transistor. Control of the circuits is explained graphically. Orig. art. has: 5 figures. [03]

ASSOCIATION: Sverdlovskoye otdeleniye Matematicheskogo instituta AN SSSR (Sverdlovsk Branch, the Mathematical Institute, AN SSSR)

Card 1/2



L 46321-65

ACCESSION NR: AP5011093

SUBMITTED: 06Feb64 ENCL: 00 SUB CODE: EC

NO REF SOV: 002 OTHER: 000 ATD PRESS: 4002

Card 2/2

L 20624-66 EWT(1)/EEC(k)-2/T/EWA(h) IJP(c)

ACC NR: AT6008787 SOURCE CODE: UR/2657/65/000/014/0143/0154

AUTHOR: Klimov, V. V.

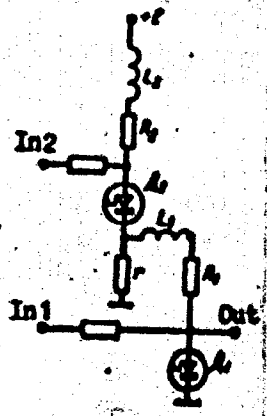
ORG: none

TITLE: Tunnel diode controllable devices

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 14, 1965, 143-154

TOPIC TAGS: tunnel diode, semiconductor device

ABSTRACT: Two types of tunnel-diode pulse-controllable circuits are briefly considered: (1) bistable devices which, switched by a control pulse, can continuously operate under either of two sets of conditions; (2) monostable devices whose type of operation can be changed for a fixed time by a control pulse. A very simple device (see figure) of this class consists of controlled circuit $L_1R_1D_1$ and controlling circuit $L_2R_2D_2$. This device can function in six variants: 1) Bistable-control trigger; 2) monostable-control trigger; 3) bistable-control flip-flop; 4) mono-



Tunnel-diode pulse-controllable circuit

Card 1/2

UDC: 621.373.5:621.382.27

L 20624-66
ACC NR: AT6006787

stable-control flip-flop; 5) bistable-control oscillator; 6) monostable-control oscillator. A modification of the above circuit can operate in all above variants, plus 7) oscillator with switchable frequency; 8) oscillator switchable into self-excitation conditions; 9) positive-pulse-started negative-pulse slave-switched oscillator. Further modifications include counter and scaler circuits. Data and oscillograms of functioning of some circuits are supplied. Orig. art. has: 10 figures and 2 formulas. [03]

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 001 / ATD PRESS: 4125

Card 2/2 BK

L 20940-66 EWT(1)/EWA)h)

ACC NR: AP6002516 (N) SOURCE CODE: UR/0286/65/000/023/0023/0023

AUTHOR: Klimov, V. V.

ORG: none

22
B

TITLE: A potential trigger. Class 21, No. 176603

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 23

TOPIC TAGS: trigger circuit, sensitivity increase

ABSTRACT: This Author Certificate presents a potential trigger motivated by a pulse of one polarity and cut off by a pulse of the other polarity. The trigger is designed for determining the sign of a function. It consists of two tunnel diodes with bi-stable states. These diodes control three transistors with a common input to both tunnel diodes (see Fig. 1). The design increases the sensitivity and the load capacity of the trigger. The tunnel diodes are connected to a circuit of two series-connected transistors with different types of conductivity. The base of the n-p-n type supplementary transistor of this circuit is connected with the collector of the p-n-p type output transistor, thus forming a circuit with mutual feedback between the diodes. This design promotes the

Card 1/2

UDC: 621.374.3

L 20940-66

ACC NR: AP6002516

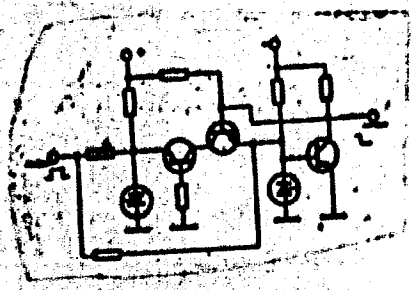


Fig. 1.

successive switching of the diodes. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 20Oct64

Card 2/2

KLIMOV, V.V., inzh.

Natural projection of design points using an approximation method. Energ. stroi. no. 4:73-75 '65. (MIRA 18:12)

REMOKVICH, A.A., dotsent, kand.tekhn.nauk; KUZNETSOV, B.A., dotsent, kand. tekhn.nauk; BILICHENKO, N. Ya., dotsent, kand.tekhn.nauk; BILAN, I. Ye., gornyy inzhener; KLIMOV, V.V., gornyy inzhener.

Mine dynamometer car and its apparatus. Vop. rud. transp. no.2:183-217 1957. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Mine railroads—Testing)
(Dynamometer)

REMGEVICH, A.A., dotsent, kand.tekhn.nauk; KLIMOV, V.V., gornyy inzhener

Testing of an electromagnetic rail brake. Vop. rud. transp. no.2:259-272 1957. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Mine railroads—Brakes)

SOV/122-59-5-16/32

AUTHORS: Bilan, I.Ye., Engineer; Klimov, V.V., Engineer, and Rengevich, A.A., Candidate of Technical Sciences, Docent

TITLE: Electric Dynamometer with Sensitive Wire Strain Gauges (Elektricheskiye dinamometry s chuvstvitel'nymi provolochnymi datchikami)

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 5, pp 47-49 (USSR)

ABSTRACT: Electric dynamometers for a dynamometric mine car made by the Dnepropetrovsk Mining Institute (Dnepropetrovskiy Gornyy institut) are illustrated and described. The working element consists of a tube, threaded at each end for screwed-on lug components. Two strain gauges of "Nichrome" wire of 0.2 mm diameter are attached inside the tube pre-loaded against thrust rings. The pre-tension can be adjusted with screws. Two compensating strain gauges are also mounted inside a tube on an unstrained insulated base. The four gauges are connected in a bridge. The strain gauges are either single-wire wound or two-wire parallel wound. The dynamometer cavity is filled with transformer oil.

Card 1/3

Electric Dynamometer with Sensitive Wire Strain Gauges

The working element is made of steel for units exceeding 1000 kg capacity. In 250 and 500 kg units the tubular element is made of "perspex" type plastic. The table gives dimensions for units from 0.25 to 100 tons. The diagonal of the bridge contains in parallel a micro-ammeter and a coil of the electro-magnetic oscillograph which can be connected at will by means of a switch. In dynamometers measuring alternating loads, the strain gauges are pre-loaded to 55% of the proportionality limit. The unbalance current in the bridge diagonal is related to the change of resistance and other electrical quantities. Two experimental two-range dynamometers with ranges of 3 and 30 tons both ways or 5 and 50 tons, respectively, have been made which have an inner and outer tubular element. The inner element is designed identically with the single-range unit. The outer tubular element is connected to the same lug component at the ends but a clearance is left so that the outer element takes over when the inner is fully

Electric Dynamometer with Sensitive Wire Strain Gauges

extended. About 30 of these dynamometers were made at the Institute and at the Toretskiy Engineering Works (Toretskiy mashinostroitel'nyy zavod). In practice these units have an error below 3%. They operate with electro-magnetic oscillographs without amplifiers. Their time lag amounts to 0.3 milliseconds. There are 4 figures, 1 table and 3 Soviet references.

RENGEVICH, A.A., kand. tekhn. nauk; KLIMOV, V.V., gornyy inzh.

Braking efficiency of trains with electric mine locomotives.
Vop. rud. transp. no.5:278-297 '61. (MIRA 16:7)

1. Dnepropetrovskiy gornyy institut (for Rengevich).
2. Institut gornogo dela AN UkrSSR (for Klimov).
(Mine railroads--Brakes)
(Electric locomotives)

POLYAKOV, N.S.; RENGEVICH, A.A., kand.tekhn.nauk; KUZNETSOV, B.A., kand.-tekhn.nauk; KLIMOV, V.V., inzh.; BILAN, I.Ye., inzh.

Normative data for fulfilling haulage estimates of electric mine haulage and for designing mine rolling stock. Vop. rud. transp. no.6:163-180 '62. (MIRA 15:8)

1. Chlen-korrespondent AN UkrSSR (for Polyakov). 2. Dnepropetrovskiy gornyy institut (for Rengevich, Kuznetsov). 3. Institut chernoy metallurgii AN UkrSSR (for Klimov, Bilan).
(Mine railroads)

REMGEVICH, A.A., kand.tekhn.nauk; KLIMOV, V.V., insh.

Time for preparing to stop electric mine locomotives. Sbor. DonUGI no.23:143-153 '62. (MIRA 16:2)
(Mine railroads—Brakes)

RENGEVICH, A.A., kand.tekhn.nauk; KLIMOV, V.V., gornyy inzhener; BILAN, I. Ye., gornyy inzhener

Industrial testing of a mine dynamometer railraod car. Vop. rud. transp. no.3:272-286 1959. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Mine railroads—Testing)